

CLAIMS

I Claim:

1. A stone cutting system, comprising:

a retaining unit having at least one trough for receiving a plurality of stone members; and

8 a cutting unit having at least one blade, wherein said at least one blade is
9 capable of being extended within said at least one trough for cutting a plurality of
10 stone members into a plurality of stone pieces.

2. The stone cutting system of Claim 1, wherein said at least one trough is comprised of an elongate structure.

3. The stone cutting system of Claim 1, wherein said at least one trough has a uniform width.

4. The stone cutting system of Claim 1, wherein said at least one trough has an adjustable width.

5. The stone cutting system of Claim 1, wherein said at least one trough has a first end and an opposing second end.

1 6. The stone cutting system of Claim 1, wherein said at least one trough
2 includes a compression member that is capable of compressing a plurality of stone
3 members in a longitudinal manner.

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6 7. The stone cutting system of Claim 6, wherein said compression member is
7 positioned within an end of said at least one trough.

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10 8. The stone cutting system of Claim 6, including at least one actuator unit
11 attached to said compression member.

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14 9. The stone cutting system of Claim 1, wherein said at least one trough
15 includes a floor.

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18 10. The stone cutting system of Claim 9, wherein said floor includes a plurality
19 of slots that allow for the passing through of a plurality of cut stone pieces.

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22 11. The stone cutting system of Claim 10, wherein said plurality of slots are
23 substantially parallel to a longitudinal axis of said at least one trough.

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26 12. The stone cutting system of Claim 9, wherein said floor is movably
27 attached to said retaining unit for allowing the passing through of a plurality of cut
28 stone pieces.

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2 13. The stone cutting system of Claim 1, wherein said retaining unit is
3 movably positioned with respect to said cutting unit along a path substantially
4 transverse to a cutting path of said cutting unit.

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7 14. The stone cutting system of Claim 1, including a conveyor unit positioned
8 beneath said retaining unit for transferring a plurality of cut stone pieces.

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11 15. The stone cutting system of Claim 1, wherein said cutting unit is comprised
12 of a gang saw.

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15 16. The stone cutting system of Claim 1, wherein cutting unit is movable in a
16 vertical manner.

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19 17. The stone cutting system of Claim 1, wherein said cutting unit is movably
20 in a horizontal manner substantially parallel to said at least one trough.

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23 18. A method of cutting a plurality of stone members, said method comprising:
24 positioning a plurality of first stone members within a first trough; and
25 cutting said plurality of first stones within said elongated trough.

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28 19. The method of cutting a plurality of stone members of Claim 18, including
29 cutting a plurality of second stone members within a second trough.